Philips Healthcare

SERVICE BULLETIN

Issued by : *PM-A Jason Pereira*

SB Ref No. : *SB86201431B*
Date : *4/13/2012*

INFORMATION ONLY — NO ACTION REQUIRED

TITLE: SB86201431B - Expression (DCU) Motherboard Upgrade

APPLIES TO:

Geography	:	*Worldwide*

Commercial (Sales) Product Number	**PMS Number:** 865214	**Part Number:** 865214
Range of Serial Numbers	*ALL*	

The only change from Rev. A to Rev. B is the correction of a part number and location of an arrow in section C, slides 13 & 14. There is no change to the procedure.

SERVICE BULLETIN INFORMATION:

This document is to provide instruction for a Geode Motherboard Upgrade on an Expression DCU. This upgrade will be necessary whenever a 453564174041 Motherboard (Old style) has failed and needs to be replaced. The 453564263971 motherboard (New style) is the replacement for the 453564174041 Motherboard (Old style).

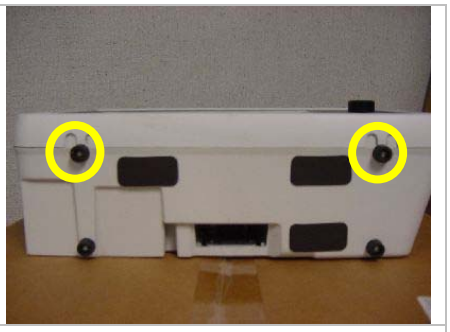
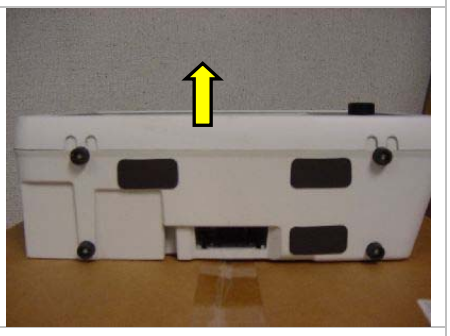
Note: It may be advantageous in some circumstances to simply order the exchange "DCU" instead of replacing the motherboard.

The below parts are necessary to perform this upgrade.

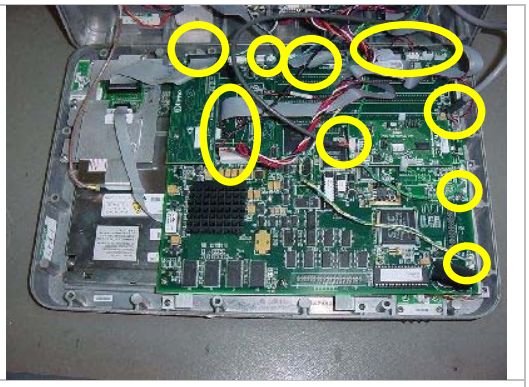
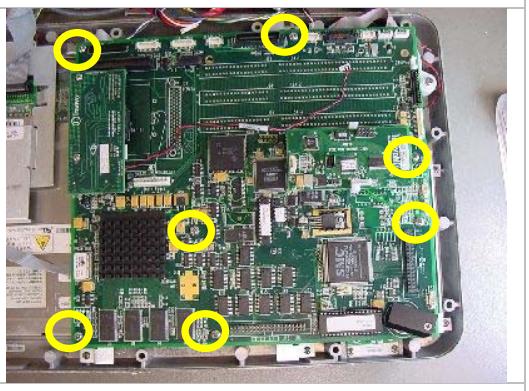
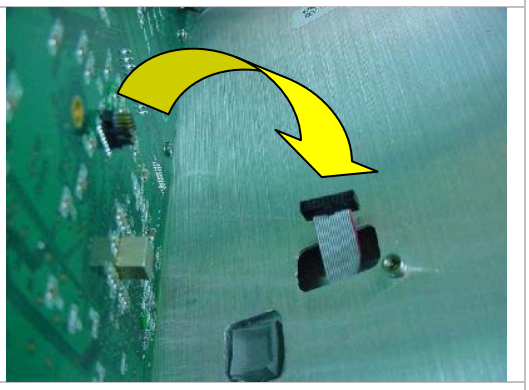
(1) **453564263971** PCA Geode based MRI Motherboard
(1) **453564253291** STAMPING BRKT, GEODE MOTHERBOARD, DCU
(1) **453564155941** SCR, #6-32 X 3/8 LG, PHMS-XR, SS, NM, PL

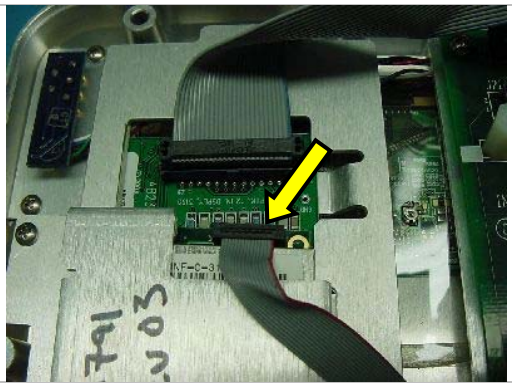
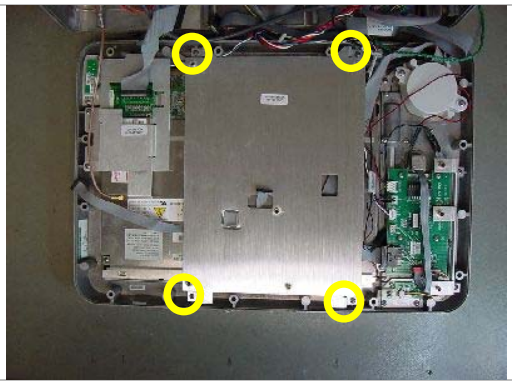
PROCEDURE:

A. Prepare Unit for Upgrade

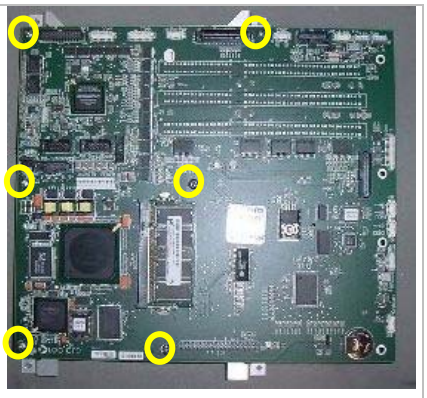
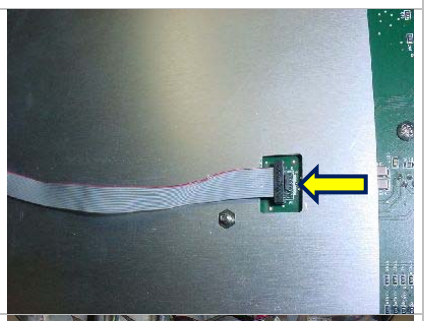
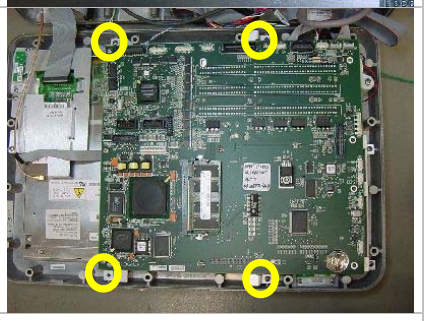
1. Remove **453564060621** front feet by removing **453564155941** Screws and **453564133441** washers. Set aside for re-use.	
2. Lift, remove and set aside **453564107941** Bezel for re-use	
3. Remove 11 ea **453564116751** screws and set aside for re-use	

B. Remove 453564174041 Motherboard

1. Unplug 14 ea cables from Motherboard as shown	
2. Remove 7 ea **453564155941** Screws from motherboard 3. Set aside screws for re-use	
4. Remove 1 ea **453564099571** Screw from **453564137681** Battery Holder 5. Set aside screw and holder for re-use	
6. Remove **453564105841** cable from backside of Motherboard 7. Set aside Mother and Daughter Boards 8. Boards will **not** be re-used	

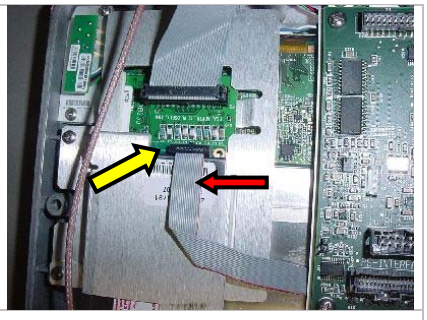
9. Unplug **453564105841** Cable from Radio 10. Set aside cable for re-use	
11. Remove 4 ea **453564155941** Screws that retain **453564155441** Mounting Plate to Casting. 12. Set aside screws for re-use 13. Mounting Plate will **not** be re-used	

C. Install New Geode Motherboard

1. Assemble **453564253291** Adapter Bracket to **453564263971** Motherboard re-using 6ea **453564155941** Screws **Use 453564138561 Blue Loctite on screw threads**	
2. Orient and connect re-used **453564105841** Cable to bottom side of Motherboard	
3. Assemble Motherboard with Bracket to casting, re-using 4 ea **453564109901** Screws. **Use 453564138561 Blue Loctite on screw threads**	

4. Orient and connect previously assembled **453564105841** Cable to Radio.

Observe colored edge stripe on cable

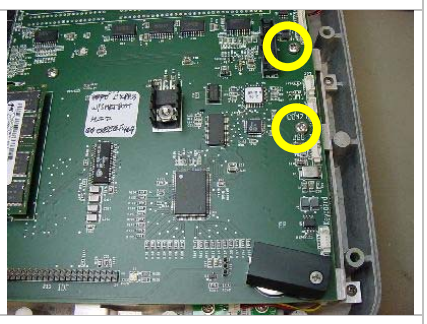


5. Assemble re-used **453564137681** to PCA re-using 1 ea **453564099571** Screw.

Use 453564138561 Blue Loctite on screw threads

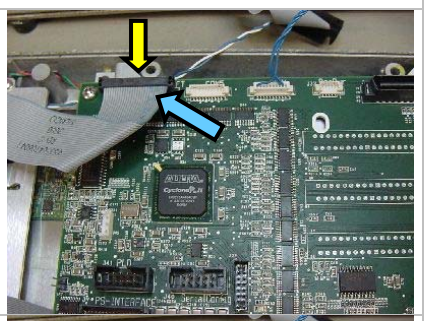
6. Assemble 1 ea re-used and 1 ea new **453564155941** Screw to Motherboard

Use 453564138561 Blue Loctite on screw threads

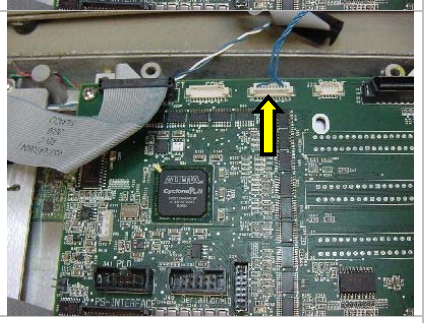


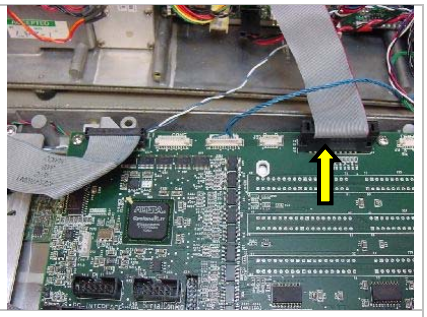
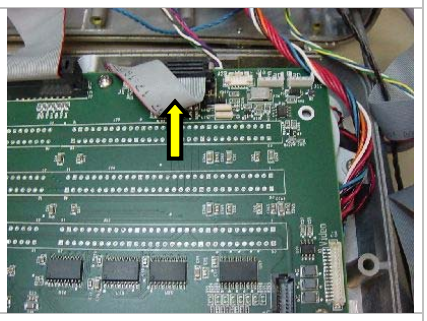
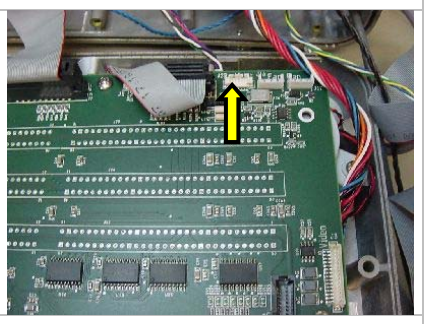
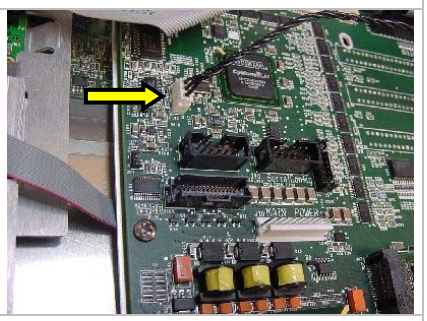
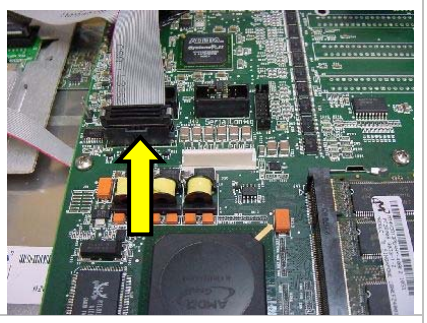
7. Orient and assemble already-connected **453564106041** Cable to **453564263971 (J1).**

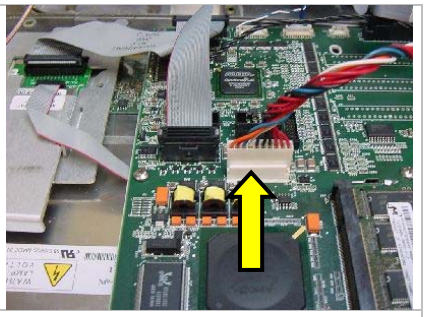
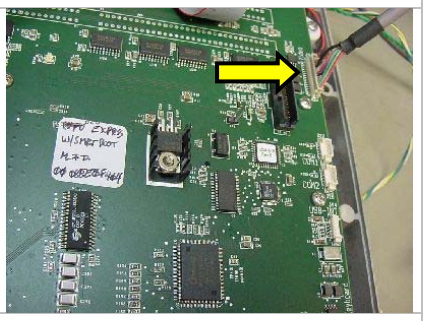
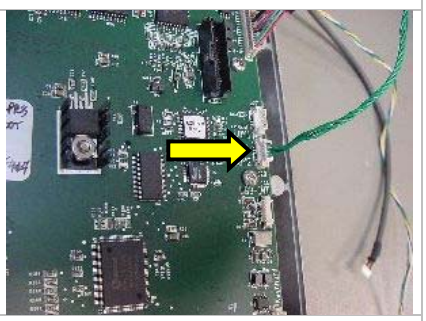
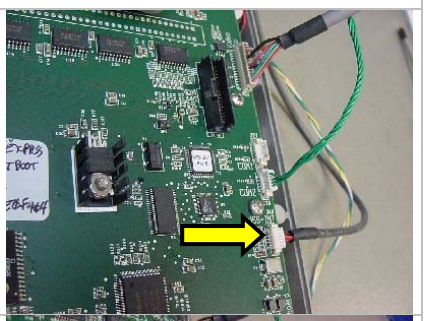
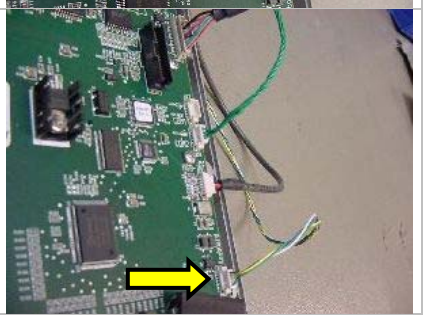
Observe Blue Stripe Orientation



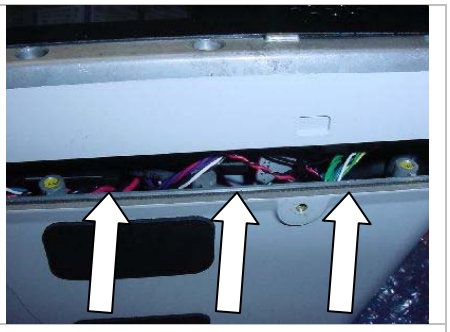
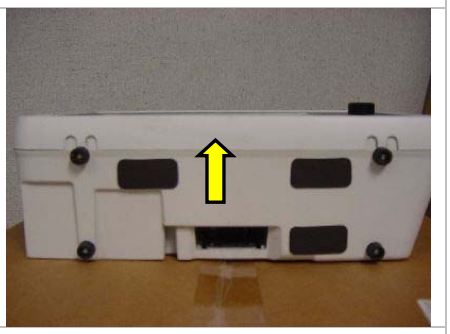
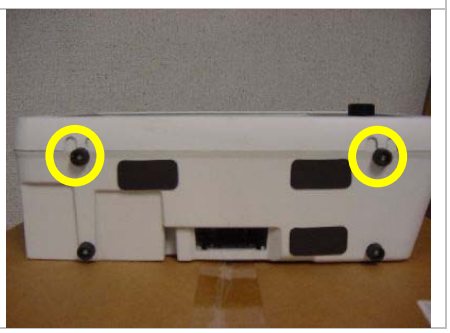
8. Connect **BLUE** section of already-assembled **AC542A** Comm Cable to **453564263971 (J15)**



9. Connect already-assembled **453564105741** Printer Cable to **453564263971 (J5)**	
10. Connect already-assembled **AC526** cable to **453564263971 (J7)** connector	
11. Connect already-assembled cable from the **453564155711** Display to **453564263971 (J2)** connector	
12. Connect already-assembled **453564106821** Cable to **453564263971 (J45)** connector	
13. Connect previously assembled **AC528A** Cable to **453564263971 (J9)**	

14. Connect already-assembled **453564137211** Data Cable to **453564263971 (J10)**	
15. Connect already-assembled **453564060661** VGA Cable to **453564263971 (J3)**	
16. Connect **GRN** section of already-assembled **AC542A** Comm Cable to **453564263971 (J28)**	
17. Connect previously assembled **453564060641** USB Cable to **453564263971 (J44)**	
18. Connect previously assembled **AC540A** Keyboard Cable to **453564263971 (J11)**	

D. Final Assembly

Known Pinch Point !! 1. With DCU laying on it's back, fit front housing to rear housing, make sure that RF gasket is in the channel, and that all cables are tucked in and clear of pinch points before adding screws	
2. Assemble two halves with 11 ea re-used **453564116751** Screws **Use 453564138561 Blue Loctite on screw threads**	
4. Assemble re-used **453564107941** Bezel	
5. Assemble 2 ea re-used **453564060621** front feet using 2 ea re-used **453564155941** Screws and **453564133441** washers. **Use 453564138561 Blue Loctite on screw threads**	

D. Software compatibility check

Confirm monitor is loaded with version 4 (Or higher) of Expression software (ET53445). If the unit contains <4 software, please load the newest version of Expression software available in Incenter.

Note: The new motherboard is only compatible with version 4 or higher.

RELATED DOCUMENTS:

Please reference the Expression Service Guide as needed (It can be found in Incenter)

EC NUMBER: 2975-2012-04-02939